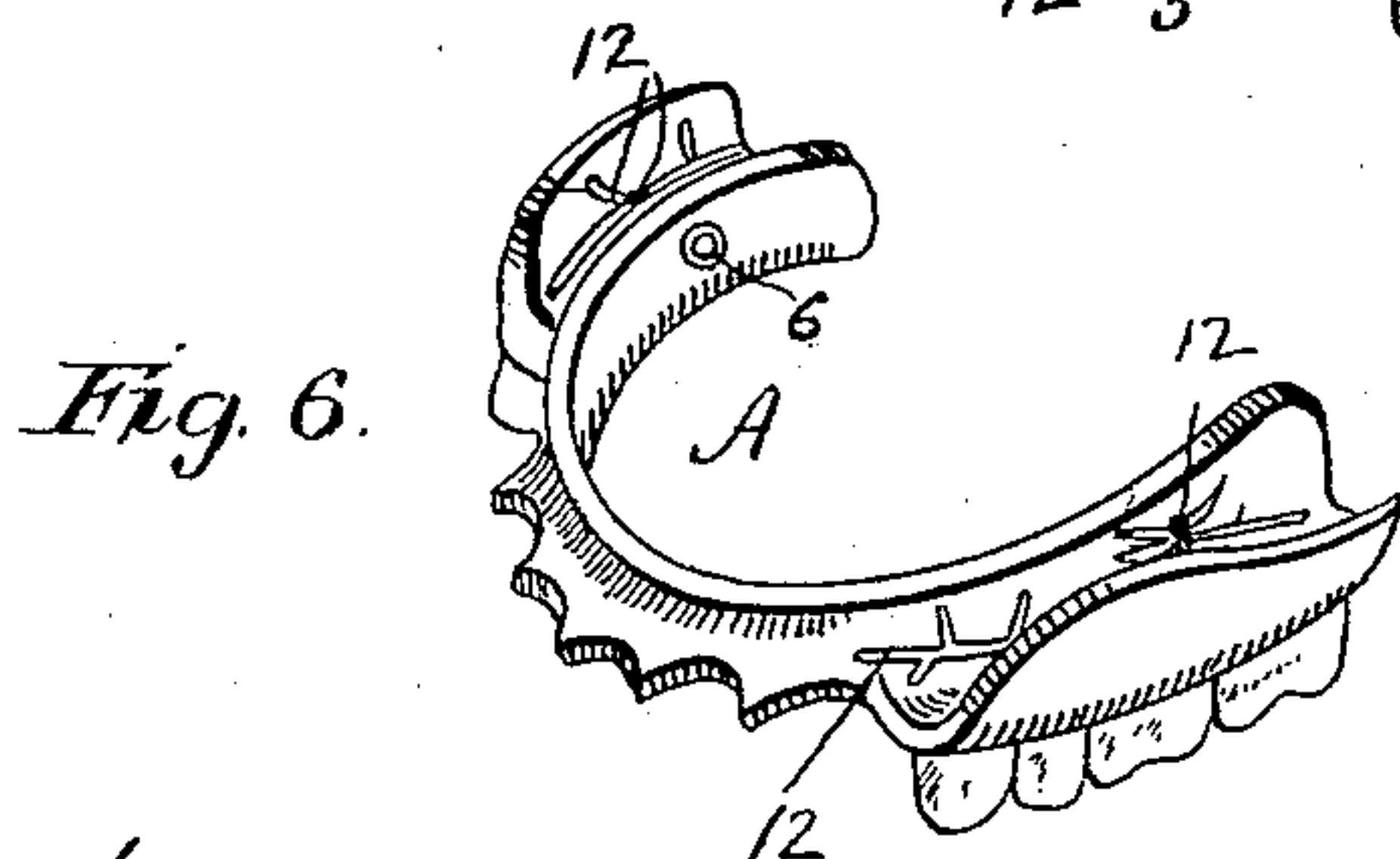
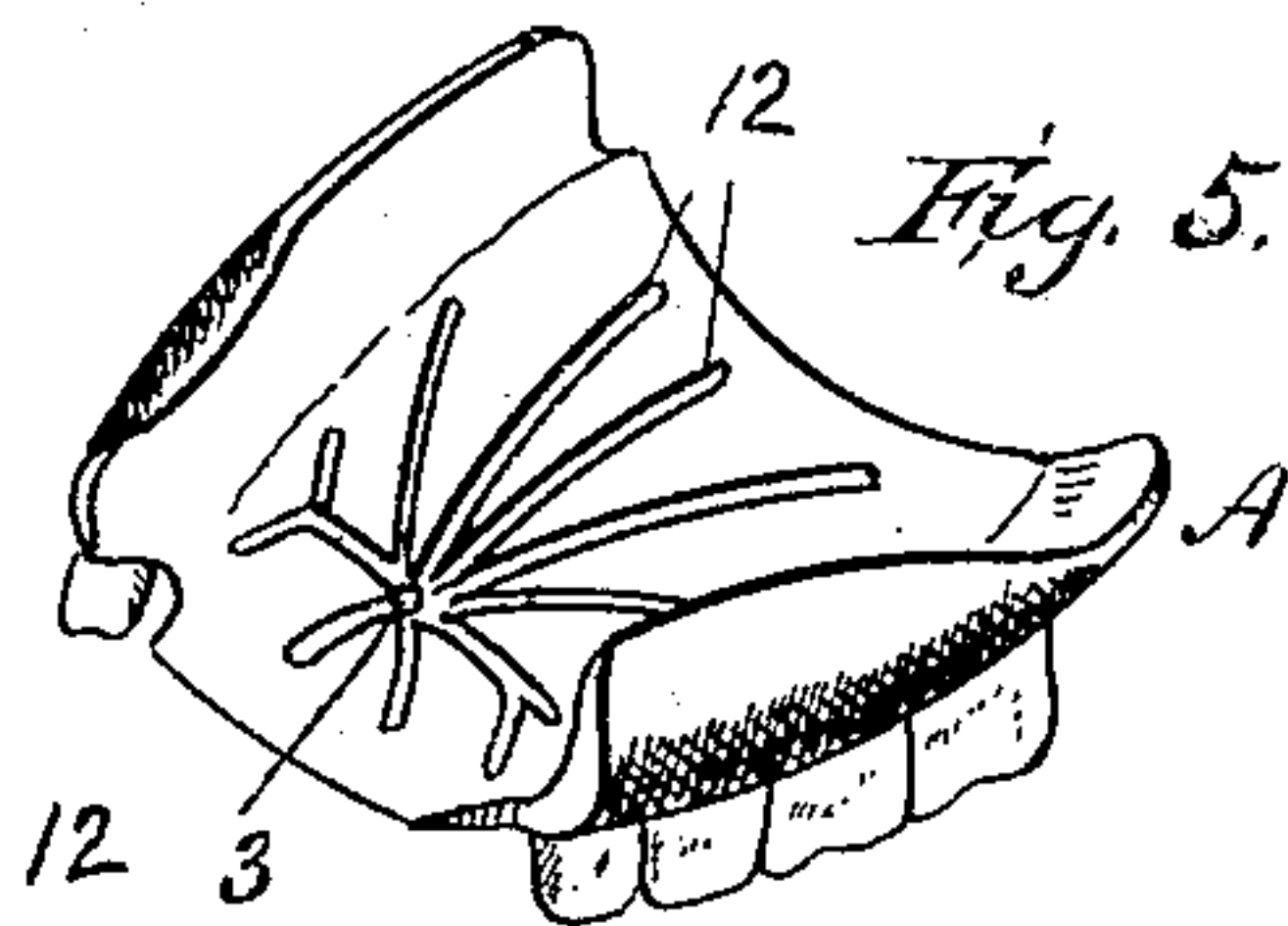
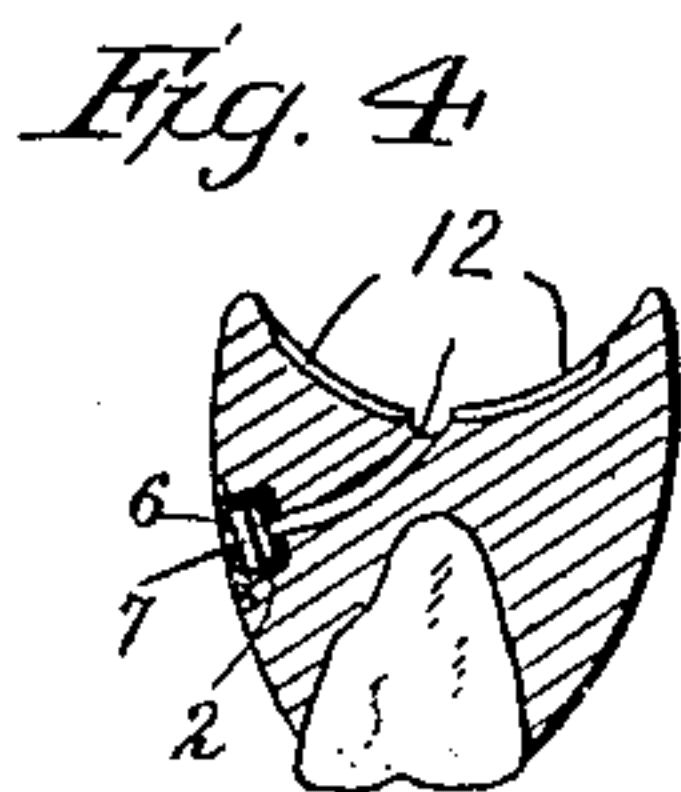
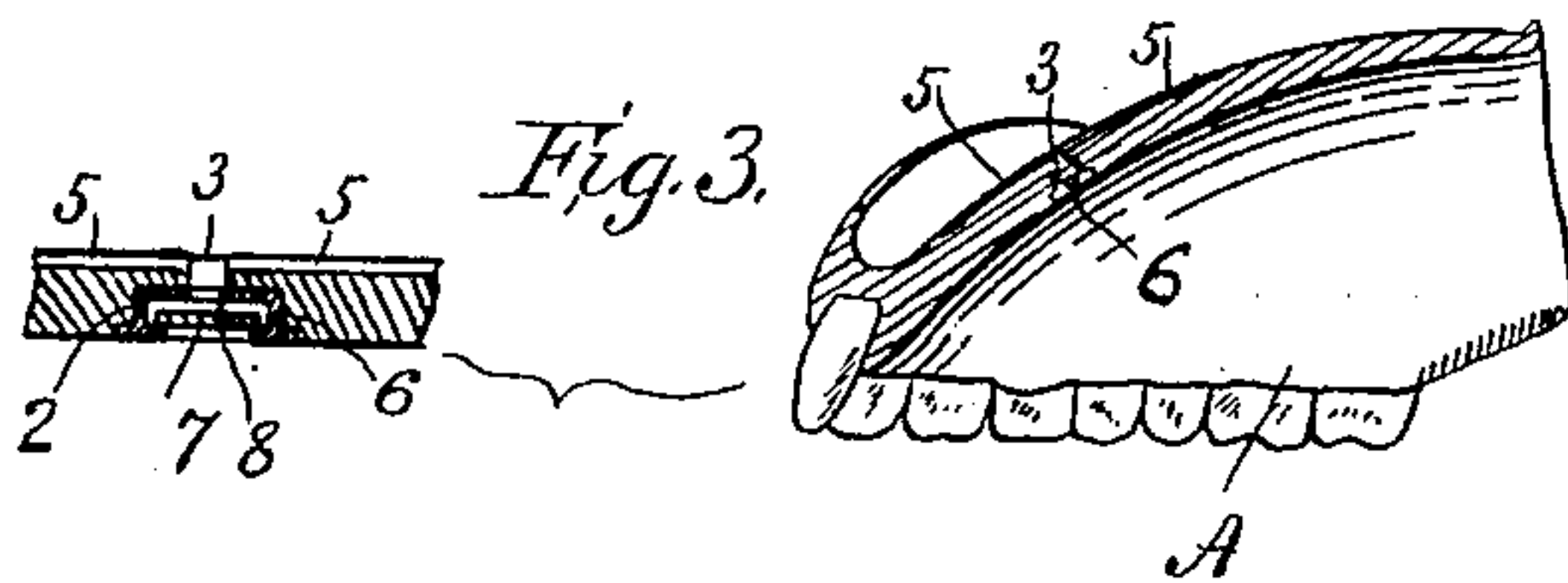
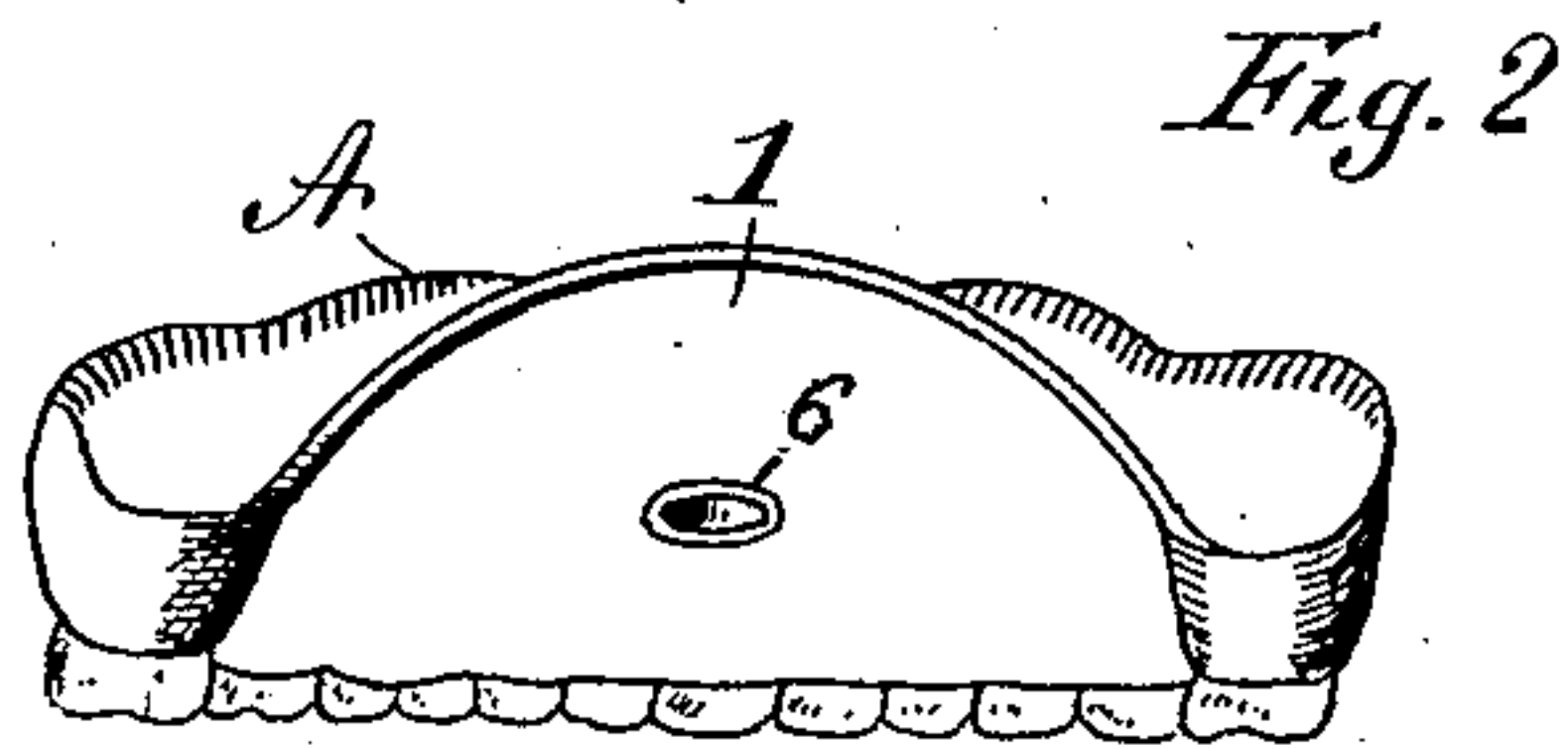
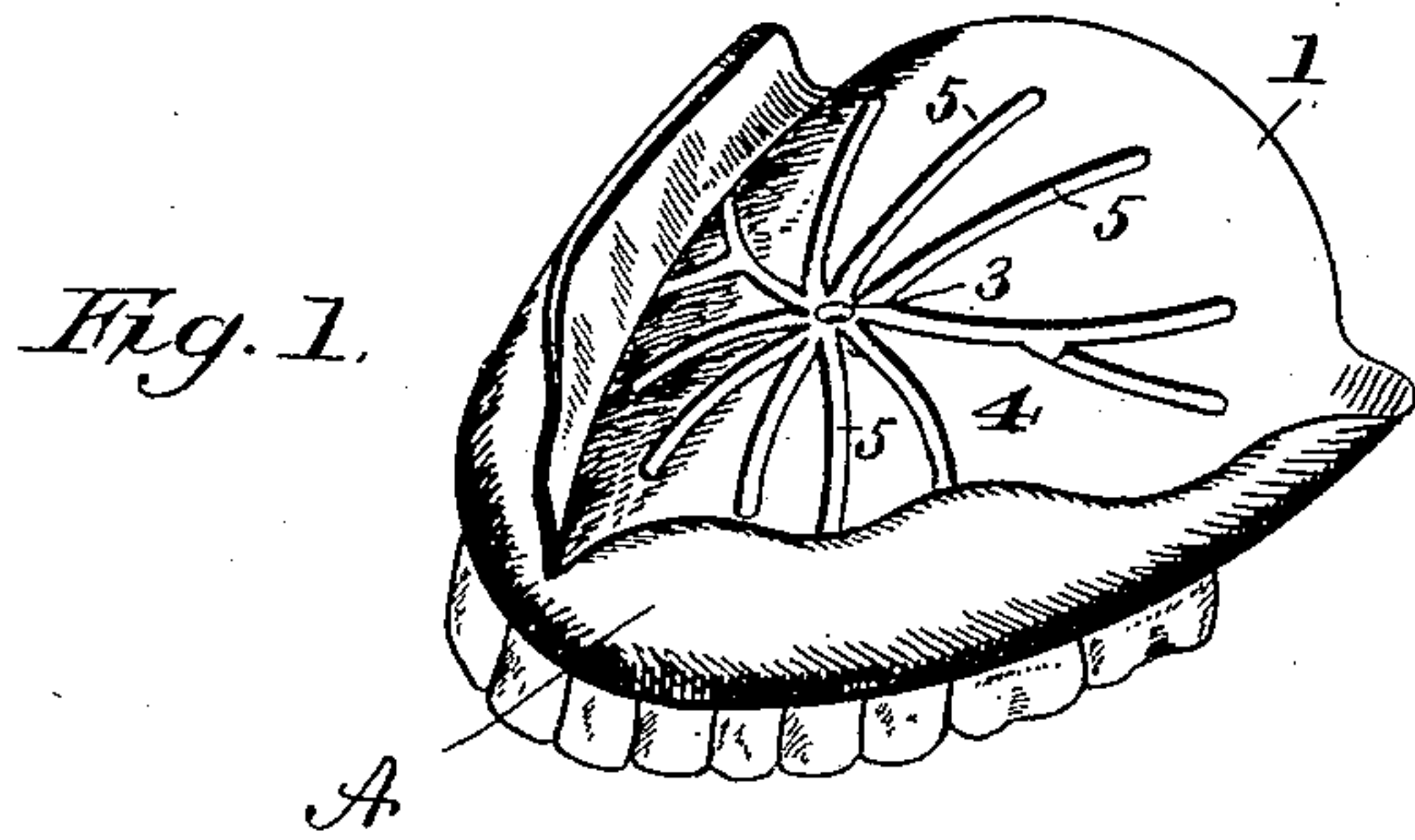


C. R. POWERS.
DENTAL SUCTION PLATE.
APPLICATION FILED JUNE 3, 1908.

912,026.

Patented Feb. 9, 1909.



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UNITED STATES PATENT OFFICE.

CHARLES R. POWERS, OF PRINCETON, WISCONSIN.

DENTAL SUCTION-PLATE.

No. 912,026.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed June 3, 1908. Serial No. 436,485.

To all whom it may concern:

Be it known that I, CHARLES R. POWERS, a citizen of the United States, residing at Princeton, in the county of Green Lake and State of Wisconsin, have invented certain new and useful Improvements in Dental Suction-Plates, of which the following is a specification.

My invention relates to an improvement in dental suction plates, and the object is to provide means for allowing the escape of air from under the bridge and thereby create a vacuum which can be used on all kinds of plates.

The invention consists of certain novel features of construction and combinations of parts which will be hereinafter described and pointed out in the claims.

In the accompanying drawings Figure 1 is a view of an upper plate; Fig. 2 is a rear view thereof; Fig. 3 is a sectional view, and Figs. 4, 5, and 6 are modifications.

A, represents the plate, which is made of the usual material, and 1 is one face of the plate having a recess 2 formed therein, which is provided with an opening 3 therethrough extending to the rear side of the plate and leading from the bridge 4 of the plate are channels or grooves 5, 5 to the opening 3. A metal cup 6 is inserted in the recess, and the upper edges of the cup are bent over upon the plate for holding the cup therein and forming a smooth surface. The edges are so bent or formed that an annular channel is formed between the base of the cup and the top of the cup and received therein, and in the annular channel a washer 7 is loosely held. An opening 8 is formed in the bottom of the cup, which is in alinement with the opening 3 which extends through the recess 2.

By the grooves or channels 5 which lead to the opening 3 from the bridge 4 the air is drawn through the cup by the suction of the tongue and mouth, and the valve or washer 7 in the cup 6 is automatically opened and closed, creating a vacuum when the air is drawn out through the cup.

In the form shown in Fig. 4 the plate is

provided with an opening 10 which extends through one side up into the bridge 11. Grooves or channels 12 are formed in the bridge leading to the openings, and in these openings the cup 6 is inserted, together with the valve 7, and the vacuum is created by the same principles for holding the plate as above described.

In Fig. 5 the device is shown as applied to a partial plate, and at the forward end of the plate and in Fig. 6 a valve is applied in the same manner as in the form shown in Fig. 4.

From the foregoing it will be seen that I have provided a valve for creating a vacuum whereby different forms of plates can be held in the mouth, and thereby do away with the artificial dentures.

It is evident that slight changes might be made in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to be limited to the exact construction herein set forth, but:

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A dental plate having a cup received in a recess in the plate, said cup having an opening therein extending through the plate and grooves leading to the opening, a valve received in the cup, and an annular channel formed in the cup for holding the valve therein.

2. A dental plate having a cup received in a recess in the plate, said cup having an opening therein extending through the plate and grooves through to the opening, edges of the cup bent to form an annular channel, and the extreme edges of the cup bent upon the plate, and a valve received in the cup and held in the annular channel.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES R. POWERS.

Witnesses:

PHILIP LEHNER,
H. J. MAXWELL.